7

8

11

CLAIMS

1 1. A method for monitoring activity on a computer 2 network, comprising:

providing a map of a group of resources, which are accessible via the computer network;

tracking access of the resources in the group by computer users, so as to identify one or more of the users with respective resources that they are accessing; and

- 9 registering with the map an identification of the 10 one or more users and the respective resources that they
 - 1 2. A method according to claim 1, wherein providing the
 - 2 map comprises generating a graph having nodes
- 3 corresponding to the resour ϕ es and edges corresponding to
- 4 links between the resources/.

are accessing.

- 1 3. A method according to claim 1, wherein providing the
- 2 map comprises mapping a \int group of pages configured for
- 3 reading by a browser program.
- 1 4. A method according to claim 3, wherein mapping the
- 2 group of pages comprises mapping pages of a World Wide
- 3 Web site.
- 1 5. A method according to claim 3, wherein tracking the
- 2 access comprises receiving notification when one of the
- 3 users enters or leaves one of the pages.
- 1 6. A method acdording to claim 5, wherein receiving the
- 2 notification comprises monitoring at least some of the
- 3 pages using a synchronous event server coupled to the
- 4 network and receiving event indications from the server
- 5 with respect t0 the pages.
- 1 7. A methoda according to claim 1, wherein registering
- 2 the identification comprises providing for one or more of

- 3 the resources respective lists qf the users accessing the
- 4 resources.
- 1 8. A method according to claim 1, wherein registering
- 2 the identification comprises providing on the map for one
- 3 or more of the resources indications of the respective
- 4 numbers of users accessing the resources.
- 1 9. A method according to chaim 8, wherein providing the
- 2 indications comprises providing an icon having the form
- 3 of a container for receiving a substance, such that a
 - fill level of the substance in the container indicates a
- 5 relative number of the users accessing the respective
- 6 resource.
- 1 10. A method according t0 claim 1, wherein registering
- 2 the identification comp η ises selecting one of the users
- 3 and marking on the map the resources that the selected
- 4 user has accessed.
- 1 11. A method according to claim 1, and comprising
- 2 initiating a synchronous communication with at least one
- 3 of the users responsive to the registered identification
- 4 of the user with the respectively-accessed resource while
- 5 the user is accessing the resource.
- 1 12. A method ac ϕ ording to claim 11, wherein initiating
- 2 the synchronous / communication comprises opening a chat
- 3 session with on $\not\in$ or more of the users accessing a given
- 4 resource.
- 1 13. A method for visualizing access to a computer
- 2 resource, comprising:
- 3 counting the number of users accessing the resource;
- 4 displaying an identification of the resource on a
- 5 computer display; and
- 6 displaying an icon in association with the
- 7 identification, the icon having the form of a container

- 8 for receiving a substance, such that a fill level of the
- 9 substance in the container indicates the number of users
- 10 accessing the resource.
 - 1 14. A method according to claim 13, wherein the
 - 2 substance comprises a fluid, whose level in the container
 - 3 rises as the number increases.
 - 1 15. A method according to claim 14, wherein a color
 - 2 representing the substance inside the container changes
 - 3 as the number increases.
 - 1 16. A method according to claim 13, wherein the resource
 - 2 comprises a Web page, and wherein counting the number of
 - 3 users accessing the resource comprises counting a current
 - number of visitors/to the Web page.
 - 1 17. A method according to claim 16, wherein counting the
 - 2 current number bf visitors to the Web page comprises
- 3 counting visitors to a first Web page, and wherein
- 4 displaying the icon comprising displaying the icon on a
- 5 second Web page.
- 1 18. A method/according to claim 17, wherein the second
- 2 Web page includes a link to the first Web page.
- 1 19. A method for interactive access to a group of
- 2 resources vaa a computer network, comprising:
- acces∮ing a first resource in the group via the
- 4 network;
- 5 receiving information, responsive to accessing the
- 6 first resource, regarding a user who is accessing a
- 7 second #esource in the group; and
- 8 communicating with the user via the network
- 9 responsive to the information, while the user is
- 10 accessing the second resource.
 - 1 20. A method according to claim 19, wherein the group of
- 2 resources comprises a group of Web pages configured for

- 3 reading by a browser program, such that accessing the
- 4 first resource comprises browsing a first page, and
- 5 accessing the second resource comprises browsing a second
- 6 page, and wherein communi ϕ ating with the user comprises
- 7 communicating while browsing the pages.
- 1 21. A method according to claim 20, wherein the group of
- 2 pages comprises a Wor∤d Wide Web site, and wherein
- 3 receiving the information comprises receiving information
- 4 regarding visitors to pages of the site other than the
- 5 first page.
- 1 22. A method according to claim 20, wherein receiving
- 2 the information comp η ises receiving notification when the
- 3 user enters or leaves one of the pages in the group.
- 1 23. A method according to claim 22, wherein receiving
- 2 the notification \not comprises monitoring at least some of
- 3 the pages using a/synchronous event server coupled to the
- 4 network and receiving event indications from the server
- 5 with respect to the pages.
- 1 24. A method /according to claim 20, wherein receiving
- 2 the information comprises receiving information
- 3 responsive t0 program code embedded in a textual
- 4 description/of one or more of the Web pages read by the
- 5 browser program.
- 1 25. A method according to claim 19, wherein receiving
- 2 the info \dot{k} mation comprises receiving for at least the
- 3 second resource a list of users accessing the resource.
- 1 26. A / method according to claim 25, wherein
- 2 communi/cating with the user comprises automatically
- 3 opening a communication link responsive to selection from
- 4 the list of the user with whom to communicate.

- 1 27. A method according to claim 19, wherein receiving
- 2 the information comprises receiving an indication of the
- 3 number of users accessing the second resource.
- 1 28. A method according to claim 19, wherein
- 2 communicating with the user comprises opening a chat
- 3 session with the user.
- 1 29. A method according to claim 19, wherein
- 2 communicating with the user comprises sharing an
- 3 application related to the resources with the user.
- 1 30. A terminal for managing a group of resources, which
- 2 are accessible via the computer network, comprising:
 - a display, adapted to display a map of the resources in the group; and
- a processor, adapted to track access of the
- 6 resources by computer users, so as to identify one or
- 7 more of the users with respective resources that they are
- 8 accessing, and to register the identification of the one
- 9 or more users and their respectively-accessed resources
- 10 with the map on the display.
 - 1 31. A terminal according to claim 30, wherein the map
 - 2 comprises a map of /a group of pages configured for
 - 3 reading by a browser program.
 - 1 32. A terminal accqrding to claim 31, wherein the group
 - 2 of pages comprises /pages of a World Wide Web site, which
 - 3 is managed by mean f of the terminal.
 - 1 33. A terminal $\int according$ to claim 31, wherein the
 - 2 processor is contigured to receive notification when one
 - 3 of the users enters or leaves one of the pages.
 - 1 34. A terminal according to claim 33, wherein the
 - 2 notification \not s provided by a synchronous event server
 - 3 coupled to the network.

- 1 35. A terminal according to claim 34, wherein the
- 2 processor is further adapted to establish a synchronous
- 3 connection with one or more of the computer users by
- 4 means of the synchronous event server.
- 1 36. A terminal according to claim 30, wherein the
- 2 processor is adapted to generate, for one or more of the
- 3 resources, respective lists of the users accessing the
- 4 resources.
- 1 37. A terminal according to claim 30, wherein the
- 2 processor is adapted to generate, for one or more of the
- 3 resources, indications on the display of the respective
- 4 numbers of users accessing the resources.
- 1 38. A terminal according to claim 30, wherein the
- 2 processor is adapted, for a selected one of the users, to
- 3 drive the display so as to mark on the map the resources
- 4 that the selected user has accessed.
- 1 39. A terminal according to claim 30, wherein the
- 2 processor is adapted to initiate a synchronous
- 3 communication with at I least one of the users responsive
- 4 to the registered identification of the user with the
- 5 respectively-accessed/ resource while the user is
- 6 accessing the resour ϕ e.
- 1 40. A terminal a ϕ cording to claim 39, wherein the
- 2 synchronous communi $oldsymbol{k}$ ation comprises a chat session.
- 1 41. A terminal for visualizing access to a computer
- 2 resource, comprising:
- a display, adapted to display an identification of
- 4 the resource; and
- a processor, adapted to drive the display to display
- 6 an icon in association with the identification, the icon
- 7 having the form of a container for receiving a substance,

39

4

5

6

7

8

9

10

11

12

13 14

1

2

3

4

5 6

7

- such that a fill level of the substance in the container 8 indicates the number of users accessing the resource. 9
- 42. Apparatus for providing interactive access by 1 2 first user to a group of resources via a computer 3 network, the apparatus comprising:
 - a display, adapted to display information; and

a processor, adapted t ϕ communicate via the network so as to access a first resource in the group via the and to receive / information, responsive accessing the first resourde, regarding a second user who is accessing a second resquirce in the group and to drive the display to display the information,

wherein the process ϕ r is operative to enable the first user to communicate with the second user via the network responsive to the information, while the second user is accessing the se ϕ ond resource.

- Apparatus accordin ϕ to claim 42, wherein the group of resources comprises a group of Web pages configured for reading by a browser program run by the processor, such that the first resource comprises a first page, and the second resource domprises a second page, and wherein the processor is c ϕ nfigured to enable the first and second users to communicate while browsing the pages.
- 1 Apparatus according to claim 43, wherein the group of pages comprises & World Wide Web site, and wherein the 2 3 processor is adapted to receive information regarding visitors to pages of the site other than the first page. 4
- 43, claim 1 Apparatus according to wherein the 2 processor is adapted to receive notification when the 3 second user enter's or leaves one of the pages in the 4 group.

- 1 46. Apparatus according to claim 45, wherein the
- 2 processor is adapted to communicate with a synchronous
- 3 event server coupled to the network and to receive event
- 4 indications from the server with respect to the pages so
- 5 as to monitor other users entering and leaving the pages.
- 1 47. Apparatus according to claim 43, wherein the pages
- 2 contain program code embedded in a textual description
- 3 thereof read by the prowser program, which enables the
- 4 processor to receive the information regarding the second
- 5 user.
- 1 48. Apparatus accorping to claim 43, wherein the
- 2 processor is configured to enable the first user to open
- 3 a chat session with the second user.
- 1 49. Apparatus according to claim 43, wherein the
- 2 processor is configured to enable the first user to share
- 3 an application related to the resources with the second
- 4 user.
- 1 50. A method for tracking visitors to a group of virtual
- 2 places accessible via a computer network, the method
- 3 comprising:
- 4 generating event indications responsive to access by
- 5 one or more of the visitors to at least a first virtual
- 6 place; and
- 7 conveying the event indications to a client for the
- 8 information of a user of the client who is not visiting
- 9 the first virtual place.
- 1 51. A method a ϕ cording to claim 50, wherein generating
- 2 the event indi $oldsymbol{q}$ ations comprises initiating an observer
- 3 process associated with the first virtual place, so as to
- 4 generate the event indications.

- 1 52. A method according to claim 51, wherein initiating
- 2 the observer process comprises initiating observer
- 3 processes at a plurality of the virtual places.
- 1 53. A method according to claim 50, wherein the virtual
- 2 places comprise Web pages.
- 1 54. A method according to claim 50, and comprising
- 2 opening a synchronous communication link between the user
- 3 of the client and at least one of the visitors.
- 1 55. A method according to claim 54, wherein opening the
- 2 synchronous communication link comprises opening a chat
- 3 window.
- 1 56. A method according to qlaim 54, wherein opening the
- 2 synchronous link compri/ses providing a shared
- 3 application.
- 1 57. A synchronous server, comprising a processor coupled
- 2 to a computer network, which is adapted to track visitors
- 3 to a group of virtual places accessible via the network
- 4 so as to generate event indications responsive to access
- 5 by one or more of the/visitors to at least a first
- 6 virtual place, and to convey the event indications to a
- 7 client for the information of a user of the client who is
- 8 not visiting the first pirtual place.
- 1 58. A server according to claim 57, wherein the virtual
- 2 places comprise Web pages.
- 1 59. A server according to claim 57, wherein the
- 2 processor is adapted to open a synchronous communication
- 3 link between the user of the client and at least one of
- 4 the visitors.
- 1 60. A computer software product for monitoring activity
- 2 on a computer net \not ork, the product comprising a computer-
- 3 readable medium/ having program instructions stored

- 4 therein, which when read by /a computer, cause the
- 5 computer to display a map of a /group of resources, which
- 6 are accessible via the computer network, and to track
- 7 access of the resources in the group by computer users so
- 8 as to identify one or more of the users with respective
- 9 resources that they are acdessing and to register the
- 10 identification of the one one users and their
- 11 respectively-accessed resources with the map.
 - 1 61. A computer software product for visualizing access
- 2 to a computer resource, the product comprising
- 3 computer-readable medium having program instructions
- 4 stored therein, which when read by a computer, cause the
- 5 computer to maintain a count of the number of users
- 6 accessing the resource and to display, in association
- 7 with an identificatibn of the resource on a computer
- 8 display, an icon having the form of a container for
- 9 receiving a substance, such that a fill level of the
- 10 substance in the container indicates the number of users
- 11 accessing the resource.
 - 1 62. A computer β oftware product for interactive access
 - 2 to a group of /resources via a computer network, the
 - 3 product comprising a computer-readable medium having
 - 4 program instru ϕ tions stored therein, which when read by a
 - 5 computer operated by a first user, cause the computer,
 - 6 upon accessing a first resource in the group via the
 - 7 network, to receive information, responsive to accessing
 - 8 the first resource, regarding a second user who is
 - 9 accessing / a second resource in the group, and to
- 10 establish/communications via the network between the
- 11 first and second users via the network responsive to the
- 12 information, while the second user is accessing the
- 13 second/resource.

